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SECRETARY OF THE AIR FORCE**

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VOLUME 4**



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Nuclear, Space, Missile, Command and Control

***EMERGENCY NUCLEAR AIRLIFT
OPERATIONS***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 13-5, *Air Force Nuclear Enterprise*, and is consistent with AFI 13-526, Volume 1, *Prime Nuclear Airlift Force Operations*, AFPD 11-2, *Aircrew Operations*, and portions of AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*, and T.O. 11N-45-51 series, *Transportation of Nuclear Weapons Materiel*. It establishes the requirements and guidance for emergency logistic airlift of DoD nuclear cargo. It applies to all personnel, especially planners, aircrews, controllers, security forces and maintenance personnel, involved in nuclear airlift and emergency nuclear logistics movements. This AFI may be supplemented at any level, but all supplements that directly implement this publication must be routed to AMC/A3N for coordination prior to certification and approval. Aircraft-specific procedures for emergency nuclear airlift missions are in specified AFI 11-2MDS Vol 3s, (*MDS*) *Operations Procedures*.

Submit suggested improvements to this instruction on AF Form 847, *Recommendation for Change of Publication*, through MAJCOM channels to AMC/A3N, 402 Scott Drive, Unit 3A1, Scott AFB, IL, 62225-5302 or by email to AMC.A3N@amc.af.mil.

This publication requires the collection and or maintenance of information protected by the Privacy Act (PA) of 1974. The authorities to collect and or maintain the records prescribed in this publication are Title 37 *United States Code*, Section 301a and Executive Order 9397, *Numbering System for Federal Accounts Relating T.O. Individual Persons*, November 22, 1943 and *E.O. 9397 (SSN)* as amended by Executive Order 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*, November 18, 2008. Forms

affected by the PA have an appropriate PA statement. System of records notice F011 AF XO Aviation Resource Management System (ARMS) applies.

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Chapter 1—GENERAL	4
1.1. Objective.	4
1.2. Key Words Explained	4
1.3. Responsibilities.	4
1.4. Distribution.	4
1.5. Protecting Classified Information.	5
1.6. Releasing Information.	5
1.7. Conduct of Operations.	6
1.8. Emergency Nuclear Airlift Standards.	6
1.9. Aircrew Selection.	6
Chapter 2—PREDEPARTURE REQUIREMENTS	8
2.1. Aircrew Requirements.	8
2.2. Aircrew Briefings.	8
2.3. Emergency Mission Kit.	8
Chapter 3—EN ROUTE OPERATIONS	9
3.1. Prior to Onload (either at home station or en route to the onload site).	9
3.2. Arrival and Onload.	9
3.3. En route to Offload.	10
3.4. Offload.	11
3.5. Emergency Procedures.	11
Chapter 4—SECURITY	13
4.1. Security Procedures.	13
4.2. Home Station.	13
4.3. Onload/Offload Base.	13
Chapter 5—CUSTODY TRANSFER PROCEDURES	14

5.1. Custody of Nuclear Cargo.	14
Chapter 6—LOGISTICS SUPPORT	15
6.1. Maintenance on Aircraft Loaded with Nuclear Cargo.	15
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	16
Attachment 2—NUCLEAR AIRLIFT RESTRICTIONS & REQUIREMENTS	20

Chapter 1

GENERAL

1.1. Objective. Guidance contained in Volume 1, 2, and 3 of this instruction series is written exclusive of each other based upon the mission that is to be executed. Specifically, guidance from one of these Volumes does not apply to any of the other Volumes. This Volume prescribes basic guidance and approved procedures for Emergency Nuclear Airlift Operations (ENAO) (formerly Emergency Nuclear Airlift Force – ENAF).

1.1.1. This Volume describes recommended actions for Courier and crew during emergency nuclear airlift operations. It is designed for those missions diverted en route to an onload site where the crew does not have the opportunity to receive a formal 618 AOC (TACC), home station, or command post briefing. However, even if a formal briefing is given, this guidance may be used as a refresher. Security, time, and ground support may not be sufficient to allow using this guidance during emergency operations. In such cases, the Courier and crew must discuss all factors and use their judgment on the best course of action to accomplish the mission. Safety and security is paramount in all decisions affecting transportation of nuclear cargo.

1.1.2. The objective is to move nuclear cargo safely under U.S. custody. Cargo aircrew may be tasked at any time to airlift nuclear weapons. The amount of preparation time and degree of assistance received will depend on the length of time the MAJCOM has to move the weapons.

1.1.3. ENAO plans will comply with AFI 91-115, *Safety Rules for Nuclear Logistics Transport by the Prime Nuclear Airlift Force*, weapon system safety rules, and Volume 1 of this regulation to the maximum extent possible.

1.2. Key Words Explained

1.2.1. "Will" and "shall" indicate a mandatory requirement.

1.2.2. "Should" is normally used to indicate a preferred, but not mandatory, method of accomplishment.

1.2.3. "May" indicates an acceptable or suggested means of accomplishment.

1.2.4. "Note" indicates operating procedures, techniques, etc., which are considered essential to emphasize.

1.3. Responsibilities. AMC, Nuclear Operations Division (AMC/A3N), is the Office of Primary Responsibility (OPR) for this instruction. Unless otherwise specified in cited source references, AMC/A3 is the waiver authority for the procedures unique to this publication and 18 AF/CC is the authority for specified mission planning and execution waivers.

1.4. Distribution. The following individuals and agencies associated with supporting or executing nuclear airlift operations will maintain a copy of this instruction:

1.4.1. Commanders of nuclear capable logistics units (PNAF/ Munitions Squadron (MUNS)/ Munitions Support Squadron (MUNSS)).

1.4.2. Operations, logistics, and safety staff agencies.

- 1.4.3. Security Forces units.
- 1.4.4. PNAF airlift squadron(s)/units.
- 1.4.5. Each individual PNAF aircrew member.
- 1.4.6. Munitions Accountable Systems Officer (MASO) for nuclear accounts.
- 1.4.7. Custodial unit Civil Engineering, Readiness and Emergency Management, and Explosive Ordnance Disposal (EOD) units.
- 1.4.8. Non-PNAF C-5, C-17, and C-130 crewmembers (authorized to maintain a copy, but should obtain a copy when tasked with executing a mission contained in this volume).

1.5. Protecting Classified Information.

- 1.5.1. Use caution at all times to avoid compromising classified information. Adhere to all available classification guidance.
- 1.5.2. AFI 16-610, *Special Weapons Overflight Guide (SWOG)*, the Air Force Nuclear Weapons Security Classification Policy, CG-W-5, *Joint DOE/DoD Nuclear Weapon Classification Policy Guide*, TCG-WPMU-2, *Joint DOE/DoD Topical Classification Guide for Weapon Production and Military Use*, Airlift Request (if used), Mission Setup Message (if used), and nuclear transportation technical orders govern the classification of nuclear mission information. Restricted data and formerly restricted data are not normally releasable to foreign nationals (NOFORN). Do not send this type of information to any agency (civilian or military) of a foreign government unless directed to do so by an authoritative publication such as the SWOG.
- 1.5.3. Do not use terms in unclassified text that reveals nuclear or classified cargo is aboard a specific aircraft or mission or at a specific location.
- 1.5.4. Do not talk around classified information. Use only the SAAM number, aircraft tail number, or Aircraft Commander's name when discussing a particular mission in unclassified media or via open lines. Do not use the term "ENAO" or "special weapons mission" in conjunction with the SAAM number, aircraft tail number, or Aircraft Commander's name. Do not associate line numbers with any of the shipping information that reveals actual nuclear cargo data (e.g., nuclear cargo or package name, net explosive weight (NEW), dimensions, or weight).
- 1.5.5. Do not talk about any aspect of an ENAO SAAM unless the other person has an appropriate security clearance and a definite need-to-know. This applies even after a mission is complete.

1.6. Releasing Information. Only appropriate commanders and public affairs officers may release information about nuclear mishaps to the public or news media. Public Affairs will ensure timely and uniform implementation of DoD approved policies as referenced in DoDI 5400.13, *Public Affairs Operations*, and AFI 35-104, *Media Operations*, to establish and conduct efficient and effective procedures for the release of nuclear activity information to the public, including news media (domestic, international), to include nuclear operations, accidents, IND incidents, or nuclear weapon significant incidents.

1.7. Conduct of Operations. Crews should be briefed and receive detailed instructions from a specific OPLAN or mission directive. If there is a conflict between this instruction and the requirements in an OPLAN or mission directive, use the OPLAN or mission directive.

1.8. Emergency Nuclear Airlift Standards. Crews are expected to use sound judgment and common sense in what may be a turbulent or tense environment. Pay particular attention to the following areas:

1.8.1. Nuclear cargo must be handled safely.

1.8.1.1. Avoid exposing nuclear cargo to abnormal levels of thermal, mechanical, or electrical energy (e.g. high heat, projectile/mechanical impact, high voltage).

1.8.1.2. Keep loading operations controlled and orderly at all times.

1.8.1.3. Load or handle only one item or pallet at a time. Crews may ask shipper or receiver personnel to help, but the overall aircraft loading responsibility still belongs to the aircrew.

1.8.2. Use standard T.O. MDS-1 and -9 loading procedures.

1.8.2.1. For mixed loads (more than one type of nuclear cargo), base the load plan on how many weapons can be properly restrained using MDS-1 and -9 criteria. Do not allow nuclear cargo to rub or touch each other when tied down.

1.8.3. If available, the T.O. MDS-16-1 is an excellent guide to use when planning the maximum density logistic movement of a single type of weapon. The tiedown patterns will aid crews in floor planning a maximum tested load. The MDS-16-1 is also a useful guide for positioning approach, rolling, parking, and step-up shoring. Step-by-step use of the MDS-16-1 is not necessary.

1.8.4. The route of flight must not violate restrictions in the classified AFI 16-610, *Special Weapons Overflight Guide* (SWOG). Over-flight of a foreign country with nuclear cargo is an extremely sensitive issue. Comply with SWOG instructions at all times. Crews without access to the SWOG, will request a route of flight that complies with the SWOG through command and control center (C2 agency) channels. The C2 agency must ensure the route of flight is provided to the aircrew by the most expeditious means available. If no route of flight is provided, fly normal air traffic control (ATC) routings to the destination. Do not divulge the nature of cargo to any en route ATC facility or country to obtain a specific clearance.

1.8.5. United States military custody of nuclear cargo is required. Normally, the Copilot, who is the Courier, has custody of the nuclear cargo for the flight. Under certain conditions, the shipper may furnish United States military Couriers who will retain custody of nuclear cargo in flight.

1.9. Aircrew Selection. All active duty or ARC aircrew on Title 10 may be used for ENAO. Time permitting, AMC will use a sliding scale of options, which may be one or more of the following:

1.9.1. Assign Prime Nuclear Airlift Force (PNAF) Loadmasters (LM) and pilots so as to have one or the other on each aircraft.

- 1.9.2. Place PNAF pilot and LM teams at the onload bases to assist with the loads and flight plans.
- 1.9.3. Use non-PNAF crews in a prepared OPLAN scenario with planned, organized loads.
- 1.9.4. Use non-PNAF crews in a short notice, bare-base environment with little or no advance preparation or assistance.

Chapter 2

PREDEPARTURE REQUIREMENTS

2.1. Aircrew Requirements.

2.1.1. Crew complement will be according to the OPLAN or specific mission directive. If not specified, use a normal crew complement.

2.1.2. The crew will be armed.

2.1.3. Crewmembers tasked for a mission that has a higher security classification than their personnel security clearance will be authorized emergency access to enough information to complete the mission. Approval authority rests with a general officer, wing commander, or wing commander equivalent and cannot be delegated.

2.2. Aircrew Briefings. Crews should be briefed on the following:

2.2.1. Purpose of the mission.

2.2.2. Classification of the mission, cargo, and locations.

2.2.3. Itinerary, including confirmation of prior coordination for hazardous material as required by instrument flight rule (IFR) supplement and alternate airfields.

2.2.4. Cargo. T.O. 11N-20-11, *General Guidance and Material Hazard Information for Nuclear Weapons, Components, and Nonnuclear Weapon Designations (C-RD)*, line numbers should be included. Obtain line numbers from the shipper prior to loading. T.O. 11N-20-11 is a classified technical order that assigns an unclassified line number to each nuclear weapon.

2.2.5. Restrictions on transporting additional general cargo or passengers.

2.2.6. Exclusion area, Two-Person Concept (TPC), and security requirements.

2.2.7. Personnel authorized to sign for nuclear cargo at the destination.

2.2.8. Current intelligence, including threat analysis.

2.2.9. SWOG route of flight restrictions.

2.2.10. Airborne intercept (SWOG).

2.2.11. Jettisoning (SWOG).

2.2.12. Command Disable System (CDS) procedures.

2.3. Emergency Mission Kit. To the maximum extent possible, the emergency mission kit will include the following items that are carried as part of the aircrew trip kit:

2.3.1. AFI 13-526, *Nuclear Airlift Operations*.

2.3.2. AFI 91-115.

2.3.3. T.O. MDS-16-1, *Loading and Air Transport of Nuclear Weapon Cargo*, if published/available.

Chapter 3

EN ROUTE OPERATIONS

3.1. Prior to Onload (either at home station or en route to the onload site).

3.1.1. Review crew responsibilities and the procedures to be used during onload (loading method, security setup, cargo receipt, and Two-Person Concept (TPC)). Do not discuss classified information over inter-phone.

3.1.2. If time permits, review the applicable section of the T.O MDS-16-1, if available. Use of the MDS-16-1 is not mandatory, but it may provide useful loading information for the cargo, such as parking and rolling shoring requirements and tiedown patterns. If the 16-1 is not available, reference AFI 11-2MDS, Vol 3, *Operations Procedures* (Chapter 21, ENAO) and applicable cargo loading manual.

3.1.3. En route and 30 minutes prior to landing, contact the onload site and notify them of estimated time of arrival (ETA). Make support requirements known (fuel, materials handling equipment (MHE), transportation, security, etc.) at this time.

3.2. Arrival and Onload. Ensure the aircraft is ready for onload prior to accepting custody of nuclear cargo.

3.2.1. Contact the senior security official and comply with the following: If crews have nuclear cargo aboard, establish a restricted area and keep everyone off the aircraft. Provide armed security until the host security forces assume responsibility.

3.2.1.1. A restricted area, encompassing the limited and exclusion areas, will be established around the aircraft. Ropes and stanchions are normally used to denote the restricted area.

3.2.1.2. A single entry control point will be established.

3.2.2. The entry controller must allow only those individuals into the restricted area who have been cleared by the Courier. Tell the entry controller which individuals are authorized into the area and, time permitting, use crew orders as an entry authorization lists (EAL) and prepared shipper lists.

3.2.3. After security is established, verify shipper identification and accomplish the Shipper briefing. The Shipper briefing should include the following: (**Note:** Accomplish the shipper briefing and cargo inspection if time and the security environment permit)

3.2.3.1. Nature, hazard, and safety regarding shipment of nuclear cargo, including line numbers from T.O. 11N-20-11, DoD class explosive hazard class or division, and net explosive weight (NEW).

3.2.3.2. Courier escort requirements.

3.2.3.3. Items requiring the Two-Person Concept (TPC).

3.2.3.4. Items that are CDS equipped and if the CDS has been activated (weapon not operational).

3.2.3.5. Items exposed to an abnormal environment or not operational.

3.2.3.6. Special handling or unique requirements particular to the cargo.

3.2.3.7. Individuals required to assist during onload or offload. Pass the information to the entry controller.

3.2.3.8. Authorized recipients at offload station. Get this information in writing.

3.2.4. The primary LM, Courier, and shipper will inspect the cargo for broken seals, exterior damage, security to carrier, wheel and casters, tiedown points, etc. Do not allow the inspection procedures to affect the security of the cargo.

3.2.5. Before starting the onload, tell the tower to notify the fire department the “onload is commencing.”

3.2.6. During onload or offload monitor the operation, assist as necessary, and ensure personnel comply with the Two-Person Concept (TPC).

3.2.7. After all cargo is onloaded, accept custody of the cargo by signing the DD Form 1911. CDS codes (if issued) must remain with an aircrew member aboard the aircraft (normally with Copilot) until custody is transferred to the receiving authority.

3.2.8. Prior to engine start, give the controlling agency (ground or tower) the parking location and approximate engine start time and announce there is hazardous cargo aboard the aircraft. Ensure a fire truck is standing by the aircraft for engine start. The armed Courier will deplane and tell the host base security to break down security and maintain surveillance until aircraft departure. The Courier and other armed crewmember will monitor access to the aircraft and crew entrance door during engine start.

3.3. En route to Offload. Use these procedures in addition to the normal operating procedures IAW the applicable MDS Vol 3.

3.3.1. Flight Plans. Enter “hazardous cargo” and the mission number in the “other information” section of the flight plan. Crews carrying inert weapons, trainers, or other items that could be mistaken for real weapons by crash or rescue personnel in an emergency will enter “inert devices.”

3.3.2. Maintain the Two-Person Concept (TPC).

3.3.3. Notify the AOC Command Center of departure time and ETA at the offload station. Be prepared to encode this information.

3.3.4. If time permits, review the security and handling procedures to be used at the offload station. Do not discuss classified information over the interphone.

3.3.5. En route to offload base. At least 30 minutes prior to landing, contact one of the following: command post, base operations, or control tower. Pass mission number and verify that the hazardous cargo information has been received. If the arrival base does not have hazardous cargo information, request the following be relayed immediately to the crash or fire protection agency and other support agencies as appropriate:

3.3.5.1. Aircraft call sign, type, and mission number.

3.3.5.2. Estimated time of arrival (ETA).

- 3.3.5.3. Department of Transportation (DOT) explosives hazard class or division (normally 1.1).
- 3.3.5.4. Net explosive weight (NEW).
- 3.3.5.5. Line numbers from T.O. 11N-20-11 if requested.
- 3.3.5.6. A request for isolated parking and security forces to meet the aircraft.
- 3.3.5.7. Inert devices, if applicable.

3.4. Offload.

3.4.1. If security forces do not meet the aircraft, the Aircraft Commander must be prepared for an immediate departure until security is established. Immediately upon block-in, deploy the armed Courier (minimum) and team (if required) to setup up security with security forces. The aircrew will keep the aircraft engines running, all aircraft doors closed and delay preparation for nuclear cargo transfer until the Courier verifies appropriate security is in place. CDS codes (if issued) must remain aboard the aircraft (normally with the Copilot) until custody is transferred to the receiving authority. Once security is established, the only personnel authorized near the aircraft are aircrew members and those support personnel necessary to install landing gear pins, ground power and wheel chocks. Monitor these people at all time.

3.4.2. Maintain the Two-Person Concept (TPC).

3.4.3. Brief the receiver on the cargo:

3.4.3.1. Nature, hazard, and safety regarding shipment of the nuclear cargo, including line numbers from T.O. 11N-20-11, DOT explosive hazard class or division, DOT class, and NEW.

3.4.3.2. Courier escort requirements.

3.4.3.3. Items requiring the Two-Person Concept (TPC).

3.4.3.4. Items that are CDS-equipped and if the CDS has been activated (weapon not operational).

3.4.3.5. Items exposed to an abnormal environment or not operational.

3.4.3.6. Special handling or unique requirements applicable to the cargo.

3.4.3.7. Individuals required to assist during the offload. Pass this information to the entry controller.

3.4.4. The receiver and Courier will conduct an inspection of the cargo for broken seals, exterior damage, etc. If discrepancies are found and they have not been previously noted, the receiver will annotate them on the DD Form 1911 and obtain the Courier's initials.

3.4.5. Transfer custody of cargo. (Receiver signs DD Form 1911).

3.4.6. Complete offload of cargo.

3.5. Emergency Procedures.

3.5.1. Security Emergencies. Crews may use deadly force to protect nuclear cargo and will resist any attempt by a hostile force to capture nuclear cargo. Consider any attack on an

aircraft loaded with nuclear cargo, including a hijacking attempt, as an attack against the nuclear cargo. Should hostages be used to gain access to, as cover for removal, or to thwart recovery of nuclear cargo, the welfare and safety of the hostages should be considered in determining actions to be taken. However, the presence of hostages shall not deter the taking of decisive, prompt, and effective action that includes the use of deadly force to recover nuclear cargo and to prevent unauthorized access to or removal of nuclear cargo. If crews are attacked, take the following actions:

3.5.1.1. Make an immediate takeoff, with the cargo if possible.

3.5.1.2. If the attack occurs during unloading or offloading, load the nuclear cargo as fast and safely as possible, even if improper procedures must be used. Ensure effective cargo restraint and take off immediately.

3.5.1.3. Some weapons are equipped with a CDS that internally destroys the capability of a weapon to achieve a significant nuclear yield. The CDS will be activated when capture of a weapon is imminent. CDS is the only disablement procedure aircrews are authorized to use.

3.5.2. Jettisoning Nuclear Cargo. The LM will identify which cargo is jettisonable IAW T.O. MDS-1. The Aircraft Commander bears a moral obligation to jettison cargo or crash-land where the least amount of damage will result. Activate the CDS, if applicable, prior to jettisoning or crash-landing. Record the coordinates of each jettisoned item. Observe the jettison restrictions in the SWOG.

3.5.3. Landing in Foreign Countries. Be prudent and as inconspicuous as possible while still protecting nuclear cargo. If confronted with demands to board or inspect the aircraft, refer to the status of US military aircraft in the DoD Foreign Clearance Guide (FCG), which states: US military aircraft are sovereign instrumentalities. US military aircraft cleared to overfly or land in a foreign territory are entitled to the privileges and immunities customarily accorded to warships. These privileges and immunities include, in the absence of stipulations to the contrary, exemption from duties and taxation; immunity from search, seizure, and inspections (including customs and safety inspection); or other exercise or jurisdiction by the host nation over the aircraft, personnel, equipment, or cargo aboard. Air Force Aircraft Commanders will not authorize search, seizure, inspection, or similar exercises of jurisdiction enumerated above by foreign authorities except by direction of USAF or the American Embassy in the country concerned. Diplomatically, but firmly, refuse any requests to board or inspect, and get help through any available United States channel.

Chapter 4

SECURITY

4.1. Security Procedures. The host base is responsible for providing security for the aircraft and the nuclear cargo. During contingency operations where nuclear weapons are dispersed, responsible commanders will take the necessary steps to provide a level of security comparable to the basic security objectives in DoD S-5210.41M_AFMAN 31-108, *Nuclear Weapons Security Manual*. The Courier officer (who has custody of the nuclear cargo) is the final authority on security matters within the exclusion area; however, crews should follow the advice and procedures of the host security force as much as possible. If the situation is serious, use judgment in determining whether to remain or load and depart quickly. Prior to takeoff, the AC will ensure security support is available at all stations being transited that day through the AOC.

4.2. Home Station. Conduct a thorough visual search of the aircraft for unauthorized explosives or stowaways. Use an explosives detection dog if available. If time is critical, do not delay the mission to “sanitize” the aircraft.

4.3. Onload/Offload Base. The host base should set up a restricted area, normally with ropes and stanchions, around the aircraft.

4.3.1. Entry Control. Use one entry point to maintain strict control of entry into the area. The entry controller will have a roster of all personnel allowed to enter. Use a copy of the flight orders for the aircrew. Instruct the entry controller to coordinate with the aircrew Courier before allowing anyone into the area. **Exception:** Allow the nuclear cargo convoy to enter the restricted area without delay.

4.3.2. Exclusion area. Do not allow anyone to be alone in the exclusion area or aircraft when nuclear cargo is present (inside either the area or the aircraft). The purpose of an exclusion area is to prevent any one person from tampering with nuclear cargo. The easiest way to enforce an exclusion area is to always be in pairs inside the exclusion area (for example, two aircrew members, two shippers, or one aircrew member and one shipper). Maintain the Two-Person Concept (TPC) throughout the flight. Do not allow anyone to be alone in the cargo compartment, crew rest area and/or cockpit. **Note:** An individual may enter a lavatory within an exclusion area without continuous direct observation by the remaining TPC team.

Chapter 5

CUSTODY TRANSFER PROCEDURES

5.1. Custody of Nuclear Cargo. The Courier must be a commissioned officer. A Copilot or third pilot is the preferred option. The Courier officer is responsible for receipt, custody, security, safety, and delivery of nuclear cargo to authorized receivers.

5.1.1. Prior to accepting and loading nuclear cargo, the shipper briefs the crew (at least the AC, Courier officer, and primary LM) on the nature and hazards of the cargo. ACs will brief crewmembers who didn't receive the shipper's briefing prior to flight. Ask the shipper to point out any specifics crews may need to handle the nuclear cargo, i.e. tiedown points, forklift stirrups, CDS procedures, etc.

5.1.2. Time permitting, the Courier and LM will inspect the cargo before accepting custody. The Courier should have the shipper verify the integrity of a weapons case and replace any broken seals. Crews may be held responsible for damage at the receiving end if crews accept damaged nuclear cargo without documentation. Document damage on the DD Form 1911, *Materiel Courier Receipt*, and obtain the shipper's initials prior to signing for the nuclear cargo.

5.1.3. The Courier accepts custody of nuclear cargo by signing the DD Form 1911 provided by the shipper. Use this form to transfer cargo custody to replacement Couriers. The Courier retains the ultimate authority to accept or deny nuclear cargo.

5.1.4. Release custody of the cargo only to a replacement Courier or someone authorized to sign for nuclear material. Authorized receivers are identified by the shipper, by message, or through the AMC command and control system.

5.1.5. Time permitting, refer any questions through the 618 AOC (TACC) Command Center to 618 AOC (TACC)/XOOOD, DSN 576-2597 for resolution.

Chapter 6

LOGISTICS SUPPORT

6.1. Maintenance on Aircraft Loaded with Nuclear Cargo.

6.1.1. Maintenance on an aircraft loaded with nuclear cargo must not violate safety rules normally used with aircraft loaded with conventional explosives. To the maximum extent possible, have maintenance and servicing completed before loading nuclear cargo on the aircraft. Do not allow maintenance, such as the following, that could increase the possibility of a fire:

6.1.1.1. Using flame or uncontrolled heat-producing items.

6.1.1.2. Repairs on the fuel system, cell, and tank or other maintenance where significant fuel spills are likely to result from disconnected lines, ruptured components, etc.

6.1.2. Aircraft will not be jacked. The temporary lifting of one set of landing gear for minor maintenance (tire change, brake change, bogie maintenance, etc.) is not considered jacking.

6.1.3. Do not refuel, defuel, or service oxygen while loading or offloading nuclear cargo. Have a fire truck standing by at the aircraft during refueling, defueling, or oxygen servicing.

6.1.4. An aircrew member will monitor all maintenance on the aircraft while nuclear cargo is aboard, dependent on TPC requirements.

WILLIAM A. CHAMBERS
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ACS, Strategic Deterrence & Nuclear Integration

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

- DoDI 4540.05, *DoD Transportation of U.S. Nuclear Weapons*, 23 June 2011
- DoDI 5400.13, *Public Affairs Operations*, 15 October 2008
- DoD S-5210.41-M, *Nuclear Weapons Security Manual*, 13 July 2009
- DoD Foreign Clearance Guide (DoD FCG) (authorized by DoDD 4500.54E, only available at <https://www.fcg.pentagon.mil> and <http://www.fcg.pentagon.smil.mil>).
- AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*, 11 November 1994
- AFMAN 31-108, *Air Force Nuclear Weapon Security Manual*, 1 February 2010
- AFPD 11-2, *Aircrew Operations*, 19 January 2012
- AFPD 13-5, *Air Force Nuclear Enterprise*, 6 July 2011
- AFPD 21-2, *Munitions*, 20 September 2005
- AFI 16-610, *Special Weapons Overflight Guide (SWOG)*
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- AFI 91-115, *Safety Rules for Nuclear Logistics Transport by the Prime Nuclear Airlift Force*, 8 September 2009
- T.O. 11N-20-11 (C-RD), *General Guidance and Material Hazard Information for Nuclear Weapons, Components, and Nonnuclear Weapon Designations*, 17 August 2011
- T.O. 11N-45-51A (S-RD), 51B, 51, *Transportation of Nuclear Weapons Material*, 10 December 2010

Adopted Forms

- AF Form 847, *Recommendation for Change of Publication*
- DD Form 1911, *Material Courier Receipt*

Abbreviations and Acronyms

- AFI**—Air Force Instruction
- AFJI**—Air Force Joint Instruction
- AFMAN**—Air Force Manual
- AFNWC/NCL**—Air Force Nuclear Weapons Center/Nuclear Logistic Division
- AFPD**—Air Force Policy Directive
- AMC**—Air Mobility Command
- AOC**—Air Operations Center

ARC—Air Reserve Component
ATC—Air Traffic Control
CC—Commander
CDS—Command Disable System
C–RD—Confidential Restricted Data
DoD—Department of Defense
DOE—Department of Energy
EAL—Entry Authority List
ENAO—Emergency Nuclear Airlift Operations
EOD—Explosive Ordnance Disposal
ETA—Estimated Time of Arrival
FCG—Foreign Clearance Guide
FCP—Foreign Clearance Program
LLC—Limited Life Component
MAJCOM—Major Command
MASO—Munitions Accountable Systems Officer
MDS—Mission Design Series (e.g., C–17)
MHE—Materials Handling Equipment
MUNS—Munitions Squadron
MUNSS—Munitions Support Squadron
NEW—Net Explosive Weight
NLT—No Later Than
NNSA—National Nuclear Security Administration
NOFORN—Not Releasable to Foreign Nationals
NWRM—Nuclear Weapons Related Material
OCONUS—Outside the Continental US
OPLAN—Operation Plan
OPR—Office of Primary Responsibility
PNAF—Prime Nuclear Airlift Force
PRP—Personnel Reliability Program
RD—Restricted Data
SAAM—Special Assignment Airlift Mission

SWOG—Special Weapons Overflight Guide

S–RD—Secret Restricted Data

TACC—Tanker Airlift Control Center

TPC—Two Person Concept

USAFE—United States Air Force in Europe

Terms

Class II Components.—Weapon components composed of fissionable or fusionable materials that contribute substantially to nuclear released during detonation.

Custody.—The responsibility for the control of, transfer and movement of, and access to, weapons and their components. Custody also includes maintaining accountability for weapons and their components.

Handling.—Physically maneuvering weapons either directly or indirectly by people.

Inert Devices.—Devices not containing hazardous materials, but closely resembling nuclear item or explosive items that are classified as hazardous.

Logistics Movement.—The transport of nuclear weapons in connection with supply or maintenance operations. Under certain specified conditions, combat aircraft may be used for such movements.

Nuclear Airlift Mission. A SAAM tasked to transport Nuclear or DoD Nuclear—Related cargo.

Nuclear Cargo.—Nuclear weapons, nuclear warheads, and Class II nuclear components prepared for logistics movement.

Nuclear—Related Cargo. Nuclear training and test weapons, non-nuclear components of nuclear weapons, limited life components (LLC), and equipment associated with the logistics movement of nuclear weapons.

Nuclear Weapon.—A complete assembly (i.e., implosion type, gun type, or thermonuclear type), in its intended ultimate configuration that, upon completion of the prescribed arming, fusing, and firing sequence, is capable of producing the intended nuclear reaction and release of energy.

Prime Nuclear Airlift Force.—Those aircrews, aircraft, and other functions that provide for peacetime support of logistical airlift of nuclear weapons and nuclear components.

Special Assignment Airlift Mission (SAAM).—All domestic requirements and those requiring special or delivery at points other than those within the established channel airlift route patterns and those that require special handling due to weight or size of the cargo, the urgency or sensitivity of movement, or other special factors.

Special Weapons Overflight Guide (SWOG). A United States Air Force— developed AFI, applicable to all elements of the DoD, which delineates areas authorized for overflight by United States aircraft carrying nuclear weapons and the specific security classification for overflight of foreign countries.

Attachment 2

NUCLEAR AIRLIFT RESTRICTIONS & REQUIREMENTS

Table A2.1. Cargo Requirements

Type of Cargo	Load by Dash 16 ⁷	Comply w/ SWOG ⁷	Two-Person Concept ^{1,7}	Cargo Classification	Security Required ^{1,7}	Remote Parking Required ⁷	PNAF Required ⁷	SAAM Required ⁷
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NUCLEAR WEAPONS, WARHEADS, AND RELATED COMPONENTS / KITS

War Reserve Weapons (Bombs, Warheads, Missiles)	Yes	Yes	Yes	S-RD	Type I	Yes	Yes	Yes
Class II Nuclear Components (H1343)	Yes	Yes	See T.O. 11N-45-51A	C-RD or S-RD	Type I	No	Yes	Yes
Limited Life Components (LLCs)	No	Yes	No	C-RD or S-RD	Type II	No	Yes ²	Yes
H1700 With or Without Components	No	Yes	No	Unclassified - S-RD	Type II	Yes	Yes	Yes
Base Spares Group X Kits	No	No	No	Unclassified	PL3	No	No	No

NUCLEAR WEAPONS RELATED TRAINING UNITS

Bomb Dummy Units (BDU)	No ³	No	No ³	Unclassified	PL3 ³	No	No	No
Munitions Dummy Unit (MDU)	No ³	No	No ³	Unclassified	PL3 ³	No	No	No
Type 3A, B, C, and D Trainers	Yes	Yes	No	Normally Secret-RD ⁴	Type II	No	No	Yes
Type 3E Trainers (OCONUS Only)	Yes	Yes	No	Unclass ⁵	PL3	No	No	No

Attachment 2 NUCLEAR AIRLIFT RESTRICTIONS & REQUIREMENTS (continued)

Type of Cargo	Load by	Comply w/	Two-Person	Cargo Classification	Security Required ^{1,7}	Remote Parking	PNAF Required ⁷	SAAM Required ⁷
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	Dash 16 ⁷	SWOG ⁷	Concept ^{1,7}			Required ⁷		
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OTHER MAJOR ASSEMBLIES (OMA) /JOINT TEST ASSEMBLIES(JTA)⁶

Joint Test Assemblies	Yes	Yes	No	S-RD	Type II	No	Yes	Yes
OMA (e.g. CTU, VFA, ITMU, TTTU)	Yes	See Note 6	No	Unclassified – S-RD	PL3 ⁶	No	Yes ²	Yes for OCONUS

Notes:

Note 1. In accordance with this table or as required by the user, whichever is more restrictive.

Note 2. Required when transported to/from OCONUS. Once in-theater, non-PNAF USAFE or AMC aircrews and aircraft may transport LLCs, other Type II cargo, and OMAs. Ref: TO 11N-45-51A.

Note 3. May simulate / execute equivalent WR weapon requirements for exercise or training purposes or per unit request.

Note 4. Type 3A, B, C, D trainers are NWRM and require positive inventory control. Ref: AFI 20-110

Note 5. Type 3E load trainers are not NWRM. Ref: AFI 20-110

Note 6. OMA’s may include but are not limited to, Joint Test Assemblies (JTA), Compatibility Test Units (CTU), Vibration Fly Around Units (VFA), Instrumented Test Measurement Units (ITMU), and Thermal Telemeter Test Units (TTTU). Transportation requirements will be determined by AFNWC/NCL. Security requirements will vary, handle IAW security classification.

Note 7. ENAO missions may not afford the opportunity for the crew or custodial installation to comply with this requirement. Do not delay safe transportation in an attempt to determine or comply with these restrictions.